

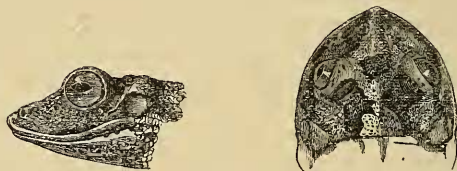
XXXIII.—*Description of a new Genus and Species of Frogs of the Family Hylidæ.* By G. A. BOULENGER.

THE new frog described in this paper was purchased of Mr. A. Forrer, who obtained it at Presidio, W. Mexico, and succeeded in bringing it alive to England. Notes are appended on the coloration and habits of two other living frogs, obtained at the same place by the same collector.

PTERNOHYLA, g. n.

Distinguished from *Hyla* by the great development of the inner metatarsal tubercle, which is strongly compressed.

*Pternohyla fodiens*, sp. n.



Tongue circular, entire and slightly free behind. Vomerine teeth in two round groups close together between the choanæ. Head moderate, broader than long, entirely bony, rough; labial borders projecting and slightly raised; snout rounded, once and a half as long as the diameter of the orbit, the profile obliquely descending from the eyes; the distance from the nostril to the orbit equals the diameter of the latter; canthus rostralis raised, curved; loreal region very wide, concave; interorbital space much broader than the upper eyelid, deeply concave; tympanum very distinct, half the diameter of the orbit. Fingers slender, slightly webbed at the base; no projecting rudiment of pollex; toes slender, moderately elongate, one-third webbed; disks of fingers and toes very small, much smaller than the tympanum; subarticular tubercles small, prominent; inner metatarsal tubercle large, compressed; no fold along the tarsus. The hind limb being carried forwards along the body, the tibio-tarsal articulation reaches the posterior corner of the eye. Skin of back closely granulate; belly and lower surface of thighs granulate. Light brown above, with large elongate insuliform dark brown black-edged spots on the back, avoiding the vertebral line; flanks marbled with dark brown; thighs and groin sulphur-yellow, marbled

with dark brown; limbs with large dark brown transverse spots; lower surfaces white, the throat with dark vermiculations. Iris golden. From snout to vent 59 millim.

This most remarkable form approaches *Tripriion* in the shape of the head; the large compressed metatarsal tubercle distinguishes it from any species of the family Hylidæ.

It is a timid creature, getting very frightened when handled, whilst all other Hylidæ I have seen alive are very indifferent under similar circumstances. It is slow in its movements, and not a good climber. Its habits are more burrowing than arboreal. It is not able to climb up a glass, but burrows itself deeply in the moss by means of its metatarsal shovels, the movements executed in this proceeding being exactly those of *Pelobates*. I believe this to be the first instance of an adaptation to both burrowing and arboreal life. Some species of *Callula*, which were formerly believed to present this combination, are truly burrowing and unable to climb to any extent; *Callula pulchra*, which I had the pleasure of seeing alive in the Jardin des Plantes a few months ago, lives exactly like *Pelobates*, to which it bears a strong resemblance in the shining skin and enormously inflated lungs.

*Hyla venulosa* (Laur.).

This species has not been hitherto recorded from Mexico. The coloration of my specimen is as follows:—Upper surfaces light brown, with large chestnut-brown spots; these occupy entirely the hinder part of the back and the hind limbs; upon the latter the lighter ground-colour appears in the form of transverse lines; on the flanks the spots are bordered with pure white; lower surfaces of a rather dirty white, the throat with brown vermiculations. The eye is very beautiful, the iris being golden with black reticulations, and a vertical and a horizontal black bar, forming a cross. The vocal bladders are black; they cannot be retracted, as in the *Ranæ* with external vocal sacs; and when empty they hang on each shoulder like a cutaneous lobe. As is well known, the bones of this frog are of a beautiful “vert de gris;” this colour is seen on the vomerine groups and on the border of the lower jaw when the mouth is open.

The attitudes and movements of *H. venulosa* are much the same as those of its European congener; but it is entirely nocturnal, remaining concealed the whole of the day. It is by no means shy, but, when handled, exudes a great quantity of poisonous fluid, more so than any Batrachian I have had before. Besides, this fluid, of a milky appearance, coagulates

instantaneously, sticking to the fingers in a very disagreeable manner; it has a strong odour, resembling that of peaches, and affects very disagreeably the mucous membrane of the nostrils, causing a strong itching.

*Phyllomedusa dacnicolor*, Cope.

The size of this species was believed to be that of *Hyla arborea*. Several specimens, brought home by Mr. Forrer, show that it attains to a very large size, viz. 83 millim. from snout to vent. The habits are those of *Hyla cærulea*, which this frog resembles in size, general proportions, and colour. The faculty of opposing the inner finger and toe is conspicuous, though less so than in the typical species of *Phyllomedusa*. The colour of the upper parts is normally bright green, but rapidly changes to olive or brown; white dots are scattered on the flanks; the lower parts are pure white; the two inner fingers, the three inner toes, the lower surface of the hands and feet, and the sides of the limbs are yellowish pink. The iris is black, vermiculated with gold; a golden line borders the vertical pupil. The nictitating lid is veined with gold, and the lower eyelid completely opaque, green.

MISCELLANEOUS.

*On the Sexuality of the Common Oyster (Ostrea edulis) and that of the Portuguese Oyster (O. angulata). Artificial Fecundation of the Portuguese Oyster.* By M. BOUCHON-BRANDELY.

TWENTY or twenty-five years ago the Portuguese oyster, which is indigenous to the Tagus, did not exist on the coasts of France. It has been acclimatized in our waters quite accidentally. A ship coming from Portugal, having suffered damage, had to discharge its cargo in order to undergo repair. The oysters which it carried were thrown into the Gironde, upon the old Banc de Richard. Meeting there with conditions favourable to their propagation, they multiplied at such a rate that from Pointe de Grave to Richard, over an extent of from 25 to 30 kilometres, they now form a vast bed, the breadth of which will soon be limited only by the banks of the river.

The sexuality of this oyster differs essentially from that of the other kinds of oysters common to our waters, of which the most wide-spread is *Ostrea edulis*: this is hermaphrodite, as Lacaze-Duthiers, Coste, Davaine, Möbius, Eyton, Hart, and many others have proved. Is it a self-sufficing hermaphrodite? With respect to